

**ABSTRACT**

**The Pattern of Antihypertensive Medication Use in Elderly Patients  
(The study was conducted at Internal Medicine Outpatient of  
Universitas Airlangga Hospital)**

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One of the most common degenerative diseases is hypertension. The prevalence of hypertension increases with age. The blood pressure in elderly patients needs to be controlled at all times to reduce possible morbidity and mortality. The physiological, pharmacokinetic and pharmacodynamic changes experienced by elderly patients caused by aging make the selection of antihypertensive therapy in elderly patients must be considered. Elderly patients often suffer not only from one disease type alone, causing them to get polypharmacy. Polypharmacy increases the chance of experiencing side effects and drug interactions. This study aimed to assess the pattern of antihypertensive medication use, including the type, dose and frequency of use, and also to find out the therapy outcomes regarding to blood pressure as well as drug related problems (DRPs) such as alleged side effects and potential drug interactions. This study was an observational prospective study. It was conducted at Internal Medicine Outpatient Unit of Universitas Airlangga Hospital, Surabaya from March to May 2018, and was found 102 patients. The most widely used antihypertensive drug class was the CCB (73,79%) consisting of amlodipine 1x5-10 mg, nifedipine OROS 1x30 mg, and diltiazem SR 1x100 mg; followed by the ARB (56.31%) consisting of candesartan 1x8-16 mg, irbesartan 1x150-300 mg, telmisartan 1x 40-80 mg, and valsartan 1x 80-160 mg. The results showed that the antihypertensive doses used by the patients were in accordance with the literature. It was found that there were usually two types of DRPs experienced by patients when using antihypertensive therapy. The most common potential drug interaction was between  $\beta$ -blockers and sulfonylureas (9.80%). The conclusion of this study is to attest that the therapy received by elderly patients in Universitas Airlangga Hospital is in accordance with the recommendations and the special attention is needed in the provision of antihypertensive therapy in elderly.

**Keyword :** antihypertensive drug, elderly, hypertension